## PATENT COOPERATION TREATY

From the INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

То:					PCT
ASTRAZENECA Global Intellectual Property S-151 85 Sodertalje SUEDE	CODE	DATE	DATE N		NOTIFICATION OF TRANSMITTAL OF THE INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
	ANKOM 1	8 JAN 20	<b>96</b>	GIPS	(PCT Rule 71.1)
	DATA ENTERED			1 .	of mailing (month/year) 16.01.2006
Applicant's or agent's file reference 101319-1 WO	CHECK	EHJ			IMPORTANT NOTIFICATION
International application No. PCT/GB2004/005337		International filing date (d 20.12.2004			nth/year) Priority date (day/month/year) 24,12,2003 24,12,2006
Applicant ASTRAZENECA AB et al.					

- The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary report on patentability and its annexes, if any, established on the international application.
- A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
- Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.

### REMINDER

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices) (Article 39(1)) (see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary report on patentability. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

The applicant's attention is drawn to Article 33(5), which provides that the criteria of novelty, inventive step and industrial applicability described in Article 33(2) to (4) merely serve the purposes of international preliminary examination and that "any Contracting State may apply additional or different criteria for the purposes of deciding whether, in that State, the claimed inventions is patentable or not" (see also Article 27(5)). Such additional criteria may relate, for example, to exemptions from patentability, requirements for enabling disclosure, clarity and support for the claims.

Name and mailing address of the international preliminary examining authority:

European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465 Authorized Officer

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Form PCT/IPEA/416 (January 2004)

# **PATENT COOPERATION TREATY**

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			ANKOM	18	JAN 20	06 GIP		
	(PCT Article 36 and Rule 70)	)				·		
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101319-1 WO			CHECK					
International application No.	International filing date (day/month/year)		date (day	mon	nth/year)	ļ		
PCT/GB2004/005337	20.12.2004	24.12	2.2003					
C07D401/06, C07D417/06, C07D	35/00, C07D405/12, C07D417/12, C07D413	3/12, C07I	D401/12,	CO	7D413/14	1,		
Applicant ASTRAZENECA AB et al.								
This report is the international particle 35 and to the international particle 35 an	preliminary examination report, established by the	is Internat	ional Prel	imin	ary Exam	ining		
Authority under Article 35 and transmitted to the applicant according to Article 36.  2. This REPORT consists of a total of 6 sheets, including this cover sheet.								
3. This report is also accompanied								
_ ` '	d to the International Bureau) a total of 12 sheet	ts, as follo	ws:			-		
<ul> <li>sheets of the description</li> <li>and/or sheets contain</li> <li>Administrative Instruction</li> </ul>	ption, claims and/or drawings which have been a ining rectifications authorized by this Authority (s actions).	mended a ee Rule 7	ind are the 0.16 and :	e ba Sec	asis of this tion 607 o	report f the		
<ul> <li>sheets which supers beyond the disclosu Supplemental Box.</li> </ul>	sede earlier sheets, but which this Authority cons re in the international application as filed, as indi	siders cont icated in it	tain an arr em 4 of B	ox N	dment that No. I and ti	goes		
b. (sent to the International sequence listing and/or t	I Bureau only) a total of (indicate type and numbe ables related thereto, in computer readable form se Listing (see Section 802 of the Administrative	oniv. as i	ndicated is	er(s n th	i)) , conta e Suppleп	ining a nental		
4. This report contains indications	relating to the following items:			==				
☐ Box No. I Basis of the o	pinion							
☐ Box No. II Priority								
	ment of opinion with regard to novelty, inventive	step and i	ndustrial a	appl	licability			
☐ Box No. IV Lack of unity of invention								
☑ Box No. V Reasoned sta applicability; c	tement under Article 35(2) with regard to novelty, itations and explanations supporting such statem	, inventive nent	step or in	ndus	strial	Ì		
☐ Box No. VI Certain docum	· · · · · · · · · · · · · · · · · · ·							
Box No. VII Certain defect	s in the international application							
☑ Box No. VIII Certain observ	ations on the international application							
Date of submission of the demand	Date of completion of this	s report						
23.09.2005	16.01.2006							
Name and mailing address of the internation	nal Authorized Officer		·		elles Pal	laces, and		
European Patent Office D-80298 Munich Saymour 1					11			
Tel. +49 89 2399 - 0 Tx: 523656 epmu d				<i>                                     </i>				
Fax: +49 89 2399 - 4465 Telephone No. +49 89 2399-8694				* A. A. C.				

# INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No. PCT/GB2004/005337

_						
_	В	ox No. I Basis of the report				
1	<ol> <li>With regard to the language, this report is based on the international application in the language in wh filed, unless otherwise indicated under this item.</li> </ol>					
		which is the language of a translation furnished for the purposes of:				
		<ul> <li>☐ international search (under Rules 12.3 and 23.1(b))</li> <li>☐ publication of the international application (under Rule 12.4)</li> <li>☐ international preliminary examination (under Rules 55.2 and/or 55.3)</li> </ul>				
2	ha	ith regard to the <b>elements</b> " of the international application, this report is based on <i>(replacement sheets which</i> ive been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this port as "originally filed" and are not annexed to this report):				
<b>.</b>	De	scription, Pages				
,	1-1	63 as originally filed				
	Cla	alms, Numbers				
	1-1	6 received on 11.11.2005 with letter of 09.11.2005				
		a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing				
3.		The amendments have resulted in the cancellation of:				
		☐ the description, pages ☐ the claims, Nos.				
		☐ the drawings, sheets/figs				
		☐ the sequence listing (specify): ☐ any table(s) related to sequence listing (specify):				
4.	□ had Su	This report has been established as if (some of) the amendments annexed to this report and listed below d not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the oplemental Box (Rule 70.2(c)).				
		☐ the description, pages ☐ the claims, Nos.				
		☐ the drawings, sheets/figs				
		☐ the sequence listing (specify): ☐ any table(s) related to sequence listing (specify):				
	*	If item 4 applies, some or all of these sheets may be marked "superseded."				

# INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No. PCT/GB2004/005337

_		x No. III Non-establishment o plicability	of op	ninion with regard to novelty, inventive step and industrial				
1	. Th	the questions whether the claimed invention appears to be novel, to involve an inventive step (to be non- povious), or to be industrially applicable have not been examined in respect of:						
		the entire international application,						
	$\boxtimes$	claims Nos. 16 (part)						
•		because:						
		the said international application, or the said claims Nos. relate to the following subject matter which does not require an international preliminary examination (specify):						
		the description, claims or drawings (indicate particular elements below) or said claims Nos. are so unclear that no meaningful opinion could be formed (specify):						
		the claims, or said claims Nos. are so inadequately supported by the description that no meaningful opinion could be formed.						
	$\boxtimes$	no international search report has been established for the said claims Nos. as above						
		the nucleotide and/or amino acid sequence listing does not comply with the standard provided for in Annex C of the Administrative Instructions in that:						
		the written form		has not been furnished				
				does not comply with the standard				
		the computer readable form		has not been furnished				
				does not comply with the standard				
		the tables related to the nucleotide and/or amino acid sequence listing, if in computer readable form only, do not comply with the technical requirements provided for in Annex C-bis of the Administrative Instructions.						
•		See separate sheet for further	detail	ls ·				

# INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No. PCT/GB2004/005337

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)

Yes: Claims

1-16

No: Claims

Inventive step (IS)

Yes: Claims No: Claims 1-16

Industrial applicability (IA)

Yes: Claims

1-16

No: Claims

2. Citations and explanations (Rule 70.7):

see separate sheet

Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

see separate sheet

# INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (SEPARATE SHEET)

International application No.

PCT/GB2004/005337

#### Re Item III

Present claim 16 relates to compounds defined by reference to process claim 15 in which it is stated that "any functional group is protected if necessary", and Lg² and Lg³ are defined as "a suitable displaceable group". Whereas these terms are considered to be clear in the context of the particular reaction claimed, they lead to a lack of clarity (Article 6 PCT) in the compound claims, divorced from the corresponding reaction conditions. It is thus unclear which specific compounds fall within the scope of said claim. Consequently, the search of claim 16 did not include compounds wherein "any functional group is protected if necessary", and the meanings of Lg² and Lg³ were restricted to the specific leaving groups listed as preferred embodiments in claim 15 as originally filed.

The opinion expressed below with regard to novelty, inventive step and industrial applicability refers only to subject-matter for which an international search report has been drawn up.

#### Re Item V

Reference is made to the following documents:

D1: WO 03/029209 A D2: WO 03/080625 A D3: WO 02/08205 A

2. The present application meets the criteria of Article 33(1) PCT:

The present compounds differ from those of D1 and D2 in the replacement of the five-membered ring fused to the pyrimidinyl ring with an ethynyl linker.

With the restriction in the meaning of A in claim 16 such that it can no longer be aryl, novelty has been restored with respect to D3.

 Claims 1-16 meet the requirements of the PCT with respect to inventive step (Article 33(3) PCT):

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (SEPARATE SHEET)

International application No.

PCT/GB2004/005337

The problem underlying the present application lies in the provision of further compounds having inhibitory activity for the Tie2 receptor tyrosine kinase and accordingly having value in the treatment of disease states associated with pathological angiogenesis.

Documents D1 and D2 disclose compounds having the same activity as the present compounds, where the main difference in structure lies in the replacement of the five-membered ring fused to the pyrimidinyl ring in D1 and D2 with an ethynyl linker. No incentive is provided in the prior art that would lead the person skilled in the art to perform this modification as a solution to the above-mentioned problem. It has been made credible that the claimed compounds solve the present problem (see present description, p. 85).

The intermediates of claim 16 are considered to bring to the present compounds of formula I the structural element which makes the contribution over the prior art and are therefore patentable with the patentable end compounds of claim 1.

#### Re item VIII

- 1. Claim 16 is unclear because the compounds are defined by reference to process claim 15 containing functional definitions which are clear within the context of the process but not in the context of an independent compound claim (cf. Item III). It is also noted that the point of attachment of L (meta or para) is implicit in claim 15 (through the reference to claim 1), but is not clearly specified in claim 16, particularly for intermediate VIc.
- Claim 10 is unclear (Article 6 PCT) owing to its reference to the description (see also Rule 6.2(a) PCT).

Form PCT/Separate Sheet/409 (Sheet 2) (EPO-January 2004)

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#### **CLAIMS**

# A compound of the Formula I:

$$R^{1}R^{2}N$$
 $N$ 
 $R^{4}$ 
 $R^{5}$ 
 $R^{6}$ 
 $R^{6}$ 
 $R^{6}$ 
 $R^{6}$ 

Formula I

wherein:

R<sup>1</sup> and R<sup>2</sup> are independently selected from hydrogen, (1-6C)alkylsulfonyl, phenyl(CH<sub>2</sub>)<sub>u</sub>- wherein u is 0, 1, 2, 3, 4, 5 or 6, (1-6C)alkanoyl, (1-6C)alkyl, (1-6C)alkoxycarbonyl, (3-6C)cycloalkyl(CH<sub>2</sub>)<sub>x</sub>- in which x is 0, 1, 2, 3, 4, 5 or 6, or a 5 or 6 membered heteroaryl ring, or R<sup>1</sup> and R<sup>2</sup> together with the nitrogen atom to which they are attached represent a saturated or partially saturated 3 to 7 membered heterocyclic ring optionally containing another hetero atom selected from N or O;

wherein the (1-6C)alkyl, the (1-6C)alkanoyl and the (3-6C)cycloalkyl groups are optionally substituted by one or more groups independently selected from fluoro, hydroxy, (1-6C)alkyl, (1-6C)alkoxy, (1-6C)alkoxy(1-6C)alkoxy, (1-6C)alkoxy, (1-6C)alkoxy(1-6C)alkoxy, amino, mono(1-6C)alkylamino, di-[(1-6C)alkyl]amino, carbamoyl, mono(1-6C)alkylcarbamoyl, di-[(1-6C)alkyl]carbamoyl, -N(R<sup>d</sup>)C(O)(1-6C)alkyl in which R<sup>d</sup> is hydrogen or (1-6C)alkyl, a saturated or partially saturated 3 to 7 membered heterocyclic ring, or a 5 or 6 membered heteroaryl ring,

wherein the (1-6C)alkoxy, (1-6C)alkoxy(1-6C)alkoxy and (1-6C)alkoxy(1-6C)alkoxy(1-6C)alkoxy groups and the (1-6C)alkyl groups of the mono(1-6C)alkylamino, di-[(1-6C)alkyl]amino, mono(1-6C)alkylcarbamoyl, di-[(1-6C)alkyl]carbamoyl and/or -N(R<sup>d</sup>)C(O)(1-6C)alkyl groups are optionally substituted by one or more hydroxy groups;

wherein the phenyl is optionally substituted by one or more groups independently selected from halo, (1-6C)alkyl, (1-6C)alkoxy, amino, mono(1-6C)alkylamino or di-[(1-6C)alkyl]amino, wherein the (1-6C)alkyl and the (1-6C)alkoxy

#### AMENDED SHEET

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groups are optionally substituted by one or more groups independently selected from hydroxy, amino, mono(1-6C)alkylamino or di-[(1-6C)alkyl]amino; and wherein any heterocyclic and heteroaryl rings within R<sup>1</sup> and/or R<sup>2</sup> are optionally independently substituted by one or more of the following: (1-4C)alkyl, (1-4C)alkoxy, (1-4C)alkoxy(1-4C)alkyl, hydroxy, amino, mono(1-6C)alkylamino, di-[(1-6C)alkyl]amino, a saturated or partially saturated 3 to 7 membered heterocyclic ring or -C(O)(CH<sub>2</sub>)<sub>x</sub>Y wherein z is 0, 1, 2 or 3 and Y is selected from hydrogen, hydroxy, (1-4C)alkoxy, amino, mono(1-6C)alkylamino, di-[(1-6C)alkyl]amino or a saturated or partially saturated 3 to 7 membered heterocyclic ring; and provided that when R<sup>1</sup> and/or R<sup>2</sup> is a (1C)alkanoyl group, then the

and provided that when R<sup>1</sup> and/or R<sup>2</sup> is a (1C)alkanoyl group, then the (1C)alkanoyl is not substituted by fluoro or hydroxy;

R³ and R⁴ are independently selected from hydrogen, (1-6C)alkyl or (1-6C)alkoxy, wherein the (1-6C)alkyl and the (1-6C)alkoxy groups are optionally substituted by one or more groups independently selected from: fluoro, hydroxy, (1-6C)alkyl, (1-6C)alkoxy, amino, mono(1-6C)alkylamino, di-[(1-6C)alkyl]amino, carbamoyl, mono(1-6C)alkylcarbamoyl or di-[(1-6C)alkyl]carbamoyl, a saturated or partially saturated 3 to 7 membered heterocyclic ring or a 5 or 6 membered heteroaryl ring, wherein said heterocyclic and heteroaryl rings are optionally independently substituted by one or more of the following: (1-4C)alkyl, (1-4C)alkoxy, hydroxy, amino, mono(1-6C)alkylamino or di-[(1-6C)alkyl]amino or a saturated or partially saturated 3 to 7 membered heterocyclic ring;

or one of  $\mathbb{R}^3$  and  $\mathbb{R}^4$  is as defined above and the other represents a group  $-\mathbb{N}\mathbb{R}^1\mathbb{R}^2$  as defined above;

A represents an aryl group or a 5 or 6 membered heteroaryl ring selected from furyl, pyrrolyl, thienyl, oxazolyl, isoxazolyl, imidazolyl, pyrazolyl, thiazolyl, isothiazolyl, oxadiazolyl, thiadiazolyl, triazolyl, tetrazolyl, pyridyl, pyridazinyl, pyrimidinyl, pyrazinyl or 1,3,5-triazinyl;

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- R<sup>5</sup> is selected from cyclopropyl, cyano, halo, (1-6C)alkoxy or (1-6C)alkyl, wherein the (1-6C)alkyl and the (1-6C)alkoxy groups are optionally substituted by cyano or by one or more fluoro;
- 5 n is 0, 1, 2 or 3;
  - L is attached meta or para on ring A with respect to the point of attachment of the ethynyl group and represents -C(RaRb)C(O)N(R9)-, -N(R8)C(O)C(RaRb)-, -N(R8)C(O)N(R9)-, -N(R8)C(O)O-, or -OC(O)-N(R9)-, wherein R8 and R9 independently represent hydrogen or (1-6C)alkyl and wherein Ra and Rb independently represent hydrogen or (1-6C)alkyl or Ra and Rb together with the carbon atom to which they are attached represent (3-6C)cycloalkyl;
  - B represents a (3-7C)cycloalkyl ring, a saturated or partially saturated 3 to 7 membered heterocyclic ring, an aryl group, a 5 or 6 membered heteroaryl ring selected from furyl, pyrrolyl, thienyl, oxazolyl, isoxazolyl, imidazolyl, pyrazolyl, thiazolyl, isothiazolyl, oxadiazolyl, thiadiazolyl, triazolyl, tetrazolyl, pyridyl, pyridazinyl, pyrimidinyl, pyrazinyl or 1,3,5-triazinyl, or a 8, 9 or 10 membered bicyclic group which optionally contains 1, 2, 3 or 4 heteroatoms independently selected from N, O and S and which is saturated, partially saturated or aromatic;
    - R<sup>6</sup> is selected from halo, cyano, oxo, a (3-7C)cycloalkyl ring, a saturated or partially saturated 3 to 7 membered heterocyclic ring, and -N(R<sup>c</sup>)C(O)(1-6C)alkyl in which R<sup>c</sup> is hydrogen or (1-6C)alkyl; or
- 25 R<sup>6</sup> is selected from (1-6C)alkyl, -S(O)<sub>p</sub>-(1-6C)alkyl wherein p is 0, 1 or 2, or (1-6C)alkoxy, wherein the (1-6C)alkyl, -S(O)<sub>p</sub>-(1-6C)alkyl and the (1-6C)alkoxy groups are optionally substituted by one or more groups independently selected from cyano, fluoro, hydroxy, (1-6C)alkoxy, amino, mono(1-6C)alkylamino, di-[(1-6C)alkyl]amino, a (3-7C)cycloalkyl ring or a saturated or partially saturated 3 to 7 membered heterocyclic ring; and

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wherein the (3-7C)cycloalkyl ring and saturated or partially saturated 3 to 7 membered heterocyclic ring are optionally independently substituted by one or more groups selected from (1-6C)alkyl; and

5 m is 0, 1, 2 or 3;

and when B is a (3-7C)cycloalkyl ring, a saturated or partially saturated 3 to 7 membered heterocyclic ring or a saturated or partially saturated 8, 9 or 10 membered bicyclic group, the rings and the bicyclic group optionally bear 1 or 2 oxo or thioxo substituents;

and salts thereof.

- 2. A compound of Formula I according to Claim 1, wherein:
- R<sup>6</sup> is selected from halo, cyano, a (3-7C)cycloalkyl ring, a saturated or partially

  saturated 3 to 7 membered heterocyclic ring or an alkanoylamino group

  -N(R<sup>6</sup>)C(O)(1-6C)alkyl in which R<sup>6</sup> is hydrogen or (1-6C)alkyl; or

  R<sup>6</sup> is selected from (1-6C)alkyl or (1-6C)alkoxy, wherein the (1-6C)alkyl and the

  (1-6C)alkoxy groups are optionally substituted by one or more groups independently selected from cyano, fluoro, hydroxy, (1-6C)alkoxy, amino, mono(1-6C)alkylamino,

  di-[(1-6C)alkyl]amino, a (3-7C)cycloalkyl ring or a saturated or partially saturated 3

to 7 membered heterocyclic ring;

and salts thereof.

- 3. A compound of the Formula I according to claim 1, wherein:
- R<sup>1</sup> and R<sup>2</sup> are independently selected from hydrogen, (1-6C)alkylsulfonyl, phenyl(CH<sub>2</sub>)<sub>u</sub>- wherein u is 0, 1, 2, 3, 4, 5 or 6, (1-6C)alkanoyl, (1-6C)alkyl, (1-6C)alkoxycarbonyl, or (3-6C)cycloalkyl(CH<sub>2</sub>)<sub>x</sub>- in which x is 0, 1, 2, 3, 4, 5 or 6 or R<sup>1</sup> and R<sup>2</sup> together with the nitrogen atom to which they are attached represent a saturated or partially saturated 3 to 7 membered heterocyclic ring optionally containing another hetero atom selected from N or O;

wherein the alkyl and the cycloalkyl groups are optionally substituted by one or more groups selected from fluoro, hydroxy, (1-6C)alkyl, (1-6C)alkoxy, amino, mono(1-6C)alkylamino or di-[(1-6C)alkyl]amino, a saturated or partially

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saturated 3 to 7 membered heterocyclic ring or a 5 or 6 membered heteroaryl ring, wherein said heterocyclic and heteroaryl rings are optionally independently substituted by one or more of the following: (1-4C)alkyl, hydroxy, amino, mono(1-6C)alkylamino or di-[(1-6C)alkyl]amino or a saturated or partially saturated 3 to 7 membered heterocyclic ring;

and wherein the phenyl is optionally substituted by one or more groups selected from halo, (1-6C)alkyl, (1-6C)alkoxy, amino, mono(1-6C)alkylamino or di-[(1-6C)alkyl]amino, wherein the (1-6C)alkyl or (1-6C)alkoxy are optionally substituted by hydroxy, amino, mono(1-6C)alkylamino or di-[(1-6C)alkyl]amino;

- R<sup>3</sup> and R<sup>4</sup> are independently selected from hydrogen, (1-6C)alkyl or (1-6C)alkoxy wherein the alkyl and the alkoxy groups are optionally substituted by one or more groups selected from fluoro, hydroxy, (1-6C)alkyl, (1-6C)alkoxy, amino, mono(1-6C)alkylamino or di-[(1-6C)alkyl]amino, a saturated or partially saturated 3 to 7 membered heterocyclic ring or a 5 or 6 membered heteroaryl ring, wherein said heterocyclic and heteroaryl rings are optionally independently substituted by one or more of the following: (1-4C)alkyl, hydroxy, amino, mono(1-6C)alkylamino or di-[(1-6C)alkyl]amino or a saturated or partially saturated 3 to 7 membered heterocyclic ring:
- or one of R<sup>3</sup> and R<sup>4</sup> is as defined above and the other represents a group -NR<sup>1</sup>R<sup>2</sup> as defined above;
- R<sup>5</sup> is selected from cyano, halo, (1-6C)alkoxy or (1-6C)alkyl optionally substituted by cyano or by one or more fluoro;
- **B** represents a (3-7C)cycloalkyl ring, an aryl or a 5 or 6 membered heteroaryl ring selected from furyl, pyrrolyl, thienyl, oxazolyl, isoxazolyl, imidazolyl, pyrazolyl, thiazolyl, isothiazolyl, oxadiazolyl, thiadiazolyl, triazolyl, tetrazolyl, pyridyl, pyridazinyl, pyrimidinyl, pyrazinyl or 1,3,5-triazinyl;
- R<sup>6</sup> is selected from halo, cyano, a saturated or partially saturated 3 to 7 membered heterocyclic ring or an alkanoylamino group -N(R<sup>c</sup>)C(O)(1-6C)alkyl in which R<sup>c</sup> is

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hydrogen or (1-6C)alkyl; or  $\mathbb{R}^6$  is selected from (1-6C)alkyl or (1-6C)alkoxy, wherein the alkyl and the alkoxy groups are optionally substituted by one or more groups selected from cyano, fluoro, hydroxy, (1-6C)alkoxy, amino, mono(1-6C)alkylamino, di-[(1-6C)alkyl]amino, or a saturated or partially saturated 3 to 7 membered heterocyclic ring; and

m is 0, 1, 2 or 3; and when m is at least 2 then two substituents on adjacent carbon atoms in ring B may together represent a methylenedioxy group;

and wherein A, L and n are as defined in Claim 1.
and salts thereof.

4. A compound according to any one of Claims 1, 2 and 3 wherein A is selected from phenyl, pyridyl, thiazolyl, thiadiazolyl or pyrimidinyl.

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- 5. A compound accordingly to any one of the preceding claims wherein B is selected from phenyl, 2,3-di-hydro-indenyl, piperidinyl, pyridyl, pyrazolyl, isothiazolyl, thiadiazolyl, isoxazolyl, benzodioxinyl, benzodioxolyl or tetrahydropyranyl
- 20 6. A compound accordingly to any one of the preceding claims wherein L is selected from -N(R<sup>8</sup>)C(O)N(R<sup>9</sup>)-, -N(R<sup>8</sup>)C(O)O- or -N(R<sup>8</sup>)C(O)CH<sub>2</sub>- wherein R<sup>8</sup> and R<sup>9</sup> independently represent hydrogen or (1-6C)alkyl.
- A compound accordingly to any one of the preceding claims wherein R<sup>1</sup> and R<sup>2</sup> are both
   hydrogen or R<sup>1</sup> is hydrogen or (1-6C)alkyl and R<sup>2</sup> is (1-6C)alkyl

wherein (1-6Calkyl) is optionally substituted by hydroxy, amino, mono(1-6C)alkylamino or di(1-6C)alkylamino, carbamoyl, (1-6C)alkoxy, (1-6C)alkoxy, -N(R<sup>d</sup>)C(O)(1-6C)alkyl in which R<sup>d</sup> is hydrogen or (1-6C)alkyl, aryl (particularily phenyl), a saturated or partially saturated 3 to 7 membered heterocyclic ring or a 5 or 6 membered heteroaryl ring;

wherein the (1-6C)alkoxy, mono(1-6C)alkylamino and -N(R<sup>d</sup>)C(O)(1-6C)alkyl groups are optionally substituted by hydroxy;

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wherein an aryl ring, a saturated or partially saturated 3 to 7 membered heterocyclic ring or a 5 or 6 membered heteroaryl ring is optionally substituted by (1-4C)alkyl, (1-4C)alkoxy or -C(O)CH<sub>2</sub>Y wherein Y is selected from hydroxy or di(1-6C)alkylamino.

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- 8. A compound accordingly to any one of the preceding claims wherein R<sup>3</sup> and R<sup>4</sup> are both hydrogen.
- 9. A compound accordingly to any one of the preceding claims wherein R<sup>6</sup> is independently selected from halo, cyano, oxo, (3-7C)cycloalkyl, a saturated 3 to 7 membered heterocyclic ring (optionally substituted by (1-4C)alkyl), -N(R<sup>c</sup>)C(O)(1-6C)alkyl wherein R<sup>c</sup> is hydrogen or (1-6C)alkyl (particularily (1-4C)alkyl), (1-6C)alkyl (optionally substituted by up to three groups independently selected from halo) or (1-6C)alkoxy and m is selected from 1 or 2.

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- 10. A compound according to Claim 1 which is any one or more of examples 1 to 152 or a salt thereof.
- 11. A pharmaceutical composition which comprises a compound of the Formula I, or a pharmaceutically acceptable salt thereof, as defined in claims 1 to 10 in association with a pharmaceutically acceptable diluent or carrier.
  - 12. A compound of the Formula I, or a pharmaceutically acceptable salt thereof, as defined in claims 1 to 10, for use as a medicament.

- 13. Use of a compound of the Formula I, or a pharmaceutically acceptable salt thereof, as defined in claims 1 to 10, in the manufacture of a medicament for use as a Tie2 receptor tyrosine kinase inhibitor in a warm-blooded animal such as man.
- 30 14. Use of a compound of the Formula I, or a pharmaceutically acceptable salt thereof, as defined in claims 1 to 10, in the manufacture of a medicament for use in the production of an anti-angiogenic effect in a warm-blooded animal such as man.

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- 15. A process for preparing a compound of formula I, or salt thereof, as defined in Claim 1, or a pharmaceutically acceptable salt thereof (wherein R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup>, R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup>, R<sup>8</sup>, R<sup>9</sup>, R<sup>10</sup>, R<sup>11</sup> L, ring A and ring B, n and m are, unless otherwise specified, as defined in Claim 1) comprising:
- 5 (a) For compounds of the formula I wherein L is -N(R<sup>8</sup>)C(O)N(H)-, the reaction of a compound of the formula II:

$$R^{1}R^{2}N$$
 $R^{4}$ 
 $R^{4}$ 
 $R^{4}$ 
 $R^{4}$ 
 $R^{4}$ 
 $R^{4}$ 
 $R^{4}$ 

wherein R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup>, R<sup>5</sup>, R<sup>8</sup>, n and A have any of the meanings defined hereinbefore except that any functional group is protected if necessary, with an isocyanate of the formula IV:

$$O = N - \left(R^{6}\right)_{m}$$

wherein R<sup>6</sup>, m and B have any of the meanings defined hereinbefore except that any functional group is protected if necessary; or

(b) For compounds of the formula I wherein L is -N(R<sup>8</sup>)C(O)N(H)-, the reaction of a compound of the formula II as defined above with an aryl carbamate of the formula III:

wherein Ar is a suitable aryl group and R<sup>6</sup>, m and B have any of the meanings defined hereinbefore except that any functional group is protected if necessary; or

(c) For compounds of the formula I wherein L is N(R<sup>8</sup>)C(O)-O-, the reaction of a compound of the formula II as defined above with a compound of the formula XI:

Χt

wherein Lg<sup>1</sup> is a suitable displaceable group and R<sup>6</sup>, m and B have any of the meanings defined hereinbefore except that any functional group is protected if necessary; or

(d) For compounds of the formula I wherein L is N(R<sup>8</sup>)C(O)C(R<sup>a</sup>R<sup>b</sup>), the reaction of a compound of the formula II as defined above with a compound of the formula IX:

$$Lg^{2} \xrightarrow{R^{a}} B$$

IX

wherein  $Lg^2$  is a suitable displaceable group,  $R^x$ -C(O)-O- or  $R^x$ -O- (wherein  $R^x$  is a suitable alkyl or aryl group) and  $R^6$ ,  $R^a$ ,  $R^b$ , m and B have any of the meanings defined hereinbefore except that any functional group is protected if necessary; or

(e) For compounds of the formula I wherein L is -N(R<sup>8</sup>)C(O)N(H)-, the reaction of a compound of the formula II as defined above with a trichloroacetylamine of the formula XIII:

wherein R<sup>6</sup>, m and B have any of the meanings defined hereinbefore except that any functional group is protected if necessary; or

(f) For compounds of the formula I wherein L is -C(R<sup>a</sup>R<sup>b</sup>)C(O)N(R<sup>9</sup>)-, the reaction of a compound of the formula XIV:

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$$R^{1}R^{2}N \xrightarrow{R^{4}} R^{4} XIV$$

wherein  $Lg^2$  is a suitable displaceable group as described above and  $R^1$ ,  $R^2$ ,  $R^3$ ,  $R^4$ ,  $R^5$ ,  $R^a$ ,  $R^b$ , n and A have any of the meanings defined hereinbefore except that any functional group is protected if necessary, with an amine of the formula XV:

$$\begin{array}{c}
H \\
R^9
\end{array}$$
 $\begin{array}{c}
N \\
\end{array}$ 
 $\begin{array}{c}
(R^6)_n \\
B
\end{array}$ 

wherein R<sup>6</sup>, R<sup>9</sup>, m and B have any of the meanings defined hereinbefore except that any functional group is protected if necessary; or

(g) The reaction of a compound of the formula XVI:

$$Lg^{3} \xrightarrow{\mathbb{R}^{4}} \mathbb{R}^{4}$$

$$XVI$$

10 wherein

wherein Lg<sup>3</sup> is a suitable displaceable group, methyl sulfonyl, methylthio or aryloxy and R<sup>3</sup>, R<sup>4</sup>, R<sup>5</sup>, R<sup>6</sup>, n, m, A, B and L have any of the meanings defined hereinbefore except that any functional group is protected if necessary, with an amine of the formula HNR<sup>1</sup>R<sup>2</sup>, wherein R<sup>1</sup> and R<sup>2</sup> have any of the meanings defined hereinbefore except that any functional group is protected if necessary; or

(h) The reaction of a compound of the formula XVII:

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wherein Lg<sup>4</sup> is a suitable displaceable group or a sulfonyloxy group and R<sup>5</sup>, R<sup>6</sup>, n, m, A, B and L have any of the meanings defined hereinbefore except that any functional group is protected if necessary, with an alkyne of the formula XVIII:

$$R^1R^2N$$
 $N$ 
 $R^4$ 

#### XVIII

wherein R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup> and R<sup>4</sup> have any of the meanings defined hereinbefore except that any functional group is protected if necessary; or

(i) For compounds of the formula I wherein L is -N(H)C(O)N(R<sup>9</sup>)-, the reaction of an isocyanate of the formula XIX:

$$R^{1}R^{2}N \xrightarrow{N} R^{4} XIX$$

$$R^{5})_{n}$$

$$N = 0$$

wherein R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup>, R<sup>5</sup>, n and A have any of the meanings defined hereinbefore except that any functional group is protected if necessary, with an amine of the formula XV as defined above; or

(j) For compounds of the formula I wherein L is -N(H)C(O)N(R<sup>9</sup>)-, the reaction of a compound of the formula XX:

$$R^2R^1N$$
 $R^3$ 
 $R^3$ 
 $R^5)_n$ 
 $R^5$ 
 $R^5$ 

wherein Ar is a suitable aryl group and R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup>, R<sup>5</sup>, n and A have any of the meanings defined hereinbefore except that any functional group is protected if necessary, with an amine of the formula XV as defined above.

and thereafter if necessary:

i) converting a compound of the Formula (I) into another compound of the Formula (I);

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- ii) removing any protecting groups;
- iii) forming a salt.
- 16. A compound selected from Formulae II, XIV, XVI, XIX and XX as defined in Claim 15, wherein A is a 5 or 6 membered heteroaryl ring selected from furyl, pyrrolyl, thienyl, oxazolyl, isoxazolyl, imidazolyl, pyrazolyl, thiazolyl, isothiazolyl, oxadiazolyl, thiadiazolyl, triazolyl, tetrazolyl, pyridyl, pyridazinyl, pyrimidinyl, pyrazinyl or 1,3,5-triazinyl

or a compound of Formula VIc:

$$Lg^{3} \xrightarrow{N} R^{4} \xrightarrow{R^{5})_{n}} A$$

Vic

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or salt thereof, wherein A is a 5 or 6 membered heteroaryl ring selected from furyl, pyrrolyl, thienyl, oxazolyl, isoxazolyl, imidazolyl, pyrazolyl, thiazolyl, isothiazolyl, oxadiazolyl, thiadiazolyl, triazolyl, tetrazolyl, pyridyl, pyridazinyl, pyrimidinyl, pyrazinyl or 1,3,5-triazinyl and Lg3, R<sup>3</sup>, R<sup>4</sup>, R<sup>5</sup> and n are as defined in Claim 15.